

SI/cs 990516WO

28 July 2000

CLAIMS

1. A roll stand with a pair of work rolls (1, 2) for rolling a metal strip (B), comprising back-up rolls (8, 9, 10, 11) which provide lateral support to their respectively allocated work rolls (1, 2), with support force directed towards the work rolls (1, 2) being able to be applied to said back-up rolls by means of a force generation device, and comprising support rolls or intermediate rolls (3, 4) which are borne by a chock which can be slid into the roll stand (W1, W2) in the direction of the longitudinal axis of said chock (7), and wherein said chock can be withdrawn from said roll stand, with each support roll or intermediate roll supporting an associated work roll (1, 2) in a direction which is essentially perpendicular to the direction of movement of the metal strip (B),

characterised in that

the back-up rolls (8, 9, 10, 11) can be positioned from an idle position in which they are arranged outside the region where the chock (7) of the support roll or intermediate roll (3, 4) moves during slide-in or withdrawal, to an operating position in which they rest against the work roll (1, 2).

2. The roll stand according to claim 1, characterised in that the force generation device moves the back-up roll (8, 9, 10, 11) from the idle position to the operating position.

3. The roll stand according to one of the preceding claims, characterised in that the force generation device is a hydraulically or pneumatically operable actuating cylinder (20, 21, 22, 23).
4. The roll stand according to one of claims 1 or 2, characterised in that the force generation device is a mechanically adjustable spindle.
5. The roll stand according to one of the preceding claims, characterised in that the back-up roll (8, 9, 10, 11) is borne by a support beam (12, 13, 14, 15) and that the force generation device acts on said support beam (12, 13, 14, 15).
6. The roll stand according to claim 5, characterised in that a bearing arrangement (18) is provided in which the back-up roll (8, 9, 10, 11) is supported, at least in certain sections along its longitudinal extension, by the support beam (12, 13, 14, 15).
7. The roll stand according to claim 6, characterised in that the bearing arrangement is provided by at least one hydrostatic bearing (18).
8. The roll stand according to claim 6, characterised in that the bearing arrangement consists of roller bearings (118) which are arranged so as to be regularly spaced apart along the back-up roll (8, 9, 10, 11).
9. The roll stand according to claims 2 and 5, characterised in that the support beam (12, 13, 14, 15) is divided into two detachably interconnected components (12a, 12b) in longitudinal direction of

the back-up roll (8, 9, 10, 11), and in that the first component (12a) bears the back-up roll (8, 9, 10, 11) and the second component is coupled to the force generation device.

10. The roll stand according to claim 6, characterised in that the first component which bears the back-up roll (8, 9, 10, 11) is held to the second component (12b) of the support beam (12, 13, 14, 15) so as to be slidable along the longitudinal direction of said first component.
11. The roll stand according to one of claims 5 to 10, characterised in that along the support beam (12, 13, 14, 15), several force generation devices are arranged so as to be spaced apart from each other.